



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/724,161

12/01/2003

Kyung-Eun Lee

46053

9389

1609

7590

03/17/2010

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

1300 19TH STREET, N.W.

SUITE 600

WASHINGTON,, DC 20036

EXAMINER

RABOVIANSKI, JIVKA A

ART UNIT

PAPER NUMBER

2426

MAIL DATE

DELIVERY MODE

03/17/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/724,161	Applicant(s) LEE ET AL.	
	Examiner JIVKA RABOVIANSKI	Art Unit 2426	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 – 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 – 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to an AMENDMENT entered January 28, 2010 for the patent application 10/724161 filed on December 01, 2003.
2. The Previous Office Action of November 03, 2009 is fully incorporated into this Final Office Action by reference.

Status of Claims

3. Claims 1 – 14 are pending.

Claims 15 - 24 are cancelled.

Claims 1 and 9 have been amended.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leporini (USPPGPubN20030110382, referred to as Leporini), and further in view of Martin (USPN 7174512, referred to as Martin).**

Paragraphs 7 - 9 apply.

Regarding claims 1 and 9:

Leporini teaches: A hybrid digital broadcasting (Leporini, [0179]; EN: the hybrid fiber coax (HFC) network) receiver for reproducing digital multimedia data:

Leporini teaches a broadcast receiving module comprising (Leporini, Fig. 4/ receiver/decoder 2000):

Leporini teaches a receiving section for receiving and demodulating a digital broadcasting data stream which includes a multiplexed and transmitted plurality of compressively encoded and scrambled programs (Leporini, [0003]; Fig. 4/ 2016, 2018, 2012 and 2014; EN: the "receiver/decoder" for receiving either encoded signal);

Leporini teaches a first demultiplexer for demultiplexing said demodulated digital broadcasting data stream, and selecting and extracting digital broadcasting data corresponding to a program selected by a user (Leporini, Fig. 2000/ 2010; EN: [0198] demultiplexer for demultiplexing the demodulated broadcasting data stream and extracting the data corresponding to remote control selection);

Leporini teaches a conditional access section for detecting conditional access information and decrypting said selected digital broadcasting data using said detected information; and a decoder module comprising (Leporini, [0176], [0263], Fig. 4 and 10; EN: the scrambled content are all delivered independently to a receiver/decoder, from a first party, second party and third party – Fig. 10/2052; the scrambled data and encrypted control word are then received by the receiver/decoder having access to an equivalent to the exploitation key stored on a smartcard inserted in the receiver/decoder to decrypt the encrypted control word and thereafter descramble the transmitted data):

a multimedia module for supplying a digital multimedia data stream that is not decrypted. Leporini teaches [0170], a hard disk is provided, on which audiovisual media and other data can be stored. Leporini does not explicitly teach a multimedia module as a separate device that provides data stream that is not decrypted. However, Martin teaches Fig. 4B PVR local storage for supply the IRD with digital content as PVR content. These contents are not decrypted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Martin

into the invention of Leporini for the purpose of making the system to have multiple sources of digital data.

Leporini teaches a decoding section for decoding digital broadcasting data output from said broadcast receiving module and digital multimedia data output from said second demultiplexer (Leporini, Fig. 4; EN: the demux 2010 executes the operation of the first and the second demultiplexer- the decoding section is connected to the demux and 2004 that receives data from the hard disc).

Leporini teaches a second demultiplexer in electrical communication with said multimedia module for receiving said digital multimedia data stream and for demultiplexing a digital multimedia data stream which includes a multiplexed plurality of compressively encoded digital multimedia data (Leporini, [0170], [0199]; EN the first demultiplexer Fig. 4/2010 for demultiplexing demodulated stream 2012 and a second demultiplexer Fig. 4/2010 coupled with the digital TV processor and media supply hard drive where the demultiplexer demultiplexes the media contained in the hard drive to video and audio portions).

Leporini does not explicitly teach a multimedia module as a separate device that provides data stream that is encoded (is not decrypted).

However, Martin teaches Fig. 4B PVR local storage for supply the IRD with digital content as PVR content. These contents are not decrypted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Martin with the teaching of multimedia source of non decrypted media into the invention of Leporini for the purpose of making the system to have multiple sources of digital data.

wherein the digital broadcasting data is inputted to the decoding section via the conditional access section from the first demultiplexer and the digital multimedia data is inputted to the decoding section from the second demultiplexer. Leporini teaches [0198] – [0199], first demultiplexer for demultiplexing the digital data supplied by the outside source such as cable or satellite and the second demultiplexer for data stored in the storage and decoded by audio and video decoders.

Regarding claims 2 and 10:

Leporini teaches: The hybrid digital broadcasting receiver according to claim 1, further comprising a smart card for receiving said conditional access information and generating a scrambling key (Leporini, Fig. 4,

[0069]; EN: the processor is preferably adapted to utilize a master session key to generate an encryption/authentication key).

Regarding claims 3 and 11:

Leporini teaches: The hybrid digital broadcasting receiver according to claim 1, wherein said conditional access information comprises program management information and subscriber management information (Leporini, [0176], [0257], [0260]; EN: the processor may be adapted to encapsulate an encrypted data object in a further encrypted data object, and furthermore may be adapted to encapsulate an Entitlement Control Message in a (Entitlement Management Message).

Regarding claims 4 and 12:

Leporini teaches: The hybrid digital broadcasting receiver according to claim 2, wherein said conditional access section receives said scrambling key from said smart card and decrypts said digital broadcasting data (Leporini, [0176]; EN: the scrambled data and encrypted control word are then received by the receiver/decoder 2000 having access to an equivalent to the exploitation key stored on a smartcard inserted in the receiver/decoder to decrypt the encrypted control word and thereafter descramble the transmitted data).

Regarding claims 5 and 13:

Leporini teaches, Fig. 4/ 2100, [0171]; EN: multimedia includes a combination of text, audio, still images, animation, video – the source of multimedia is hard disc that contains video, audio and image data; audiovisual and other data can be stored. Leporini teaches [0170], [0199]; EN the first demultiplexer Fig. 4/2010 for demultiplexing demodulated stream 2012 and a second demultiplexer Fig. 4/2010 coupled with the digital TV processor and media supply hard drive where the demultiplexer demultiplexes the media in the hard drive.

However, Martin teaches in Fig. 4B a local storage (PVR) for supply the IRD with digital content as PVR content. These contents are not decrypted and the digital data are demultiplexed by audio and video data and provide to the decoder.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Martin with the teaching of multimedia source of non decrypted media into the invention of Leporini for the purpose of making the system to have multiple sources of digital data.

Regarding claim 6:

Leporini teaches the hybrid digital broadcasting receiver according to claim 1, wherein said digital multimedia data comprises audio data and video data (Leporini, Fig. 4/ 2024 and 2026).

Regarding claim 7:

Leporini teaches the hybrid digital broadcasting receiver according to claim 6, wherein said second demultiplexer separates said audio data and said video data from said digital multimedia data stream (Leporini, Fig. 4; EN: the demux 2010 separates the received signal into two signals audio and video – 2024 and 2026; see rejection in claim 1).

Regarding claims 8 and 14:

Leporini teaches the hybrid digital broadcasting receiver according to claim 1, wherein said broadcast receiving module and said decoder module are each formed in a single integrated circuit (Leporini, [0392], [0394], Fig. 7; EN: integrated circuits capable of performing the operations required in the receiver/decoder; where some components may be implemented by dedicated hardware).

Response to Arguments

6. Applicant's arguments filed 04/06/2009 related to claims 1 – 33 have been fully considered but they are not persuasive.

In reference to Applicant's argument:

II Kitazato discloses that packets such as video/audio data and the like can be extracted by a demultiplexer (see col. 15, lines 61-64). Further, Kitazato teaches that MPEG video data separated by the demultiplexer 70 is inputted to an MPEG video decoder 55 and the MPEG audio data is inputted to the MPEG audio decoder 54 (see col. 17, lines 18-20). That is, Kitazato discloses a demultiplexer 70 in electrical communication with a descrambler 52 for receiving descrambled data based on a descramble key (i.e. decrypted data). Accordingly, Applicants' teachings are advantageous over conventional digital multimedia broadcasting receivers, which decrypt demultiplexed digital broadcasting data at the conditional access section and then decode the data at the decoding section, since the Applicants provide a second demultiplexer to deliver the digital media data to the decoding section without decryption at the conditional access section. Therefore, Kitazato fails to disclose a multimedia module for supplying a digital multimedia data stream that is not decrypted and a second demultiplexer in electrical communication with the multimedia module for receiving the digital multimedia data stream.

Examiner's Response:

The reference of Kitazato was replaced by the reference of Martin that has a multimedia module with not decrypted stream. The rejection is based on the content of the specification (see paragraph 7 below) that incorporates: "TS demultiplexer 231 demultiplexes the input data and separates the multiplexed video and audio data" included in [0043] and Fig. 2 in Lee specification. Leporini teaches that the demultiplexer does it - see Fig. 4/ the stream is demultiplexed and audio and video streams are the output of the demultiplexer 2010.

Examination Considerations

7. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d, 1393, 1404-05, 162 USPQ 541,550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.
8. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior

art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

9. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

10. Examiner's Opinion: paragraphs 7 - 9 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jivka Rabovianski whose telephone number is (571) 270-1845. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH HIRL can be reached on (571) 272-3685. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is

available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jivka Rabovianski/

March 12, 2010

/Joseph P. Hirl/

Supervisory Patent Examiner, Art Unit 2426

March 15, 2010